



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: July 14, 2009

TO: Mayor and Councilmembers

FROM: Engineering Division, Public Works Department

SUBJECT: Contract For Design Services For The Escondido And Bothin Water Pump Stations Rehabilitation

RECOMMENDATION:

That Council authorize the Public Works Director to execute a contract with AECOM, USA, Incorporated (AECOM), in the amount of \$109,065 for design services for the Escondido and Bothin Water Pump Stations Rehabilitation, and authorize the Public Works Director to approve expenditures of up to \$10,900 for extra services of AECOM that may result from necessary changes in the scope of work.

DISCUSSION:

BACKGROUND

The Escondido Pump Station is located at Escondido Reservoir, 110 Skyline Circle, and supplies domestic water to areas on the Mesa. Demand for water in the Escondido Pump Station service area has seen an increase since its last major overhaul in 1985. The Urban Water Management Plan predicts an additional 11% increase in water demand based on future development potential.

Bothin Pump Station is located at East Reservoir, 51 Crestview Lane, and supplies domestic water to a small north-eastern portion of the City. The area served by the Bothin Pump Station has not seen significant changes in water demands, and is currently operating as originally designed. Future water demands for the Bothin Pump Station are anticipated to remain relatively consistent.

Both pump stations have been in operation 24 hours per day, 7 days per week, since their last major rehabilitation in 1985. The current water pumps, mechanical appurtenances, electrical services, and instrumentation systems at both pump stations are outdated and nearing the end of their lifecycles. Preliminary research into energy use at both pump stations indicates a potential for energy savings and a reduction in maintenance by incorporating newer technology that would reduce the current frequency of on and off cycling of the pumps and motors.

PROJECT DESCRIPTION

The primary goals of the project are to increase the size of the pumps at the Escondido Pump Station to accommodate future water demands, and to replace the existing fixed speed pumps and motors at both pump stations with variable frequency drive pumps and motors. This will provide both greater pumping efficiencies and energy savings. The work at both pump stations includes pump replacements, pipe and valve replacements, pressure gauge replacements, electrical improvements, and Supervisory Control And Data Acquisition system integration.

DESIGN PHASE CONSULTANT ENGINEERING SERVICES

Staff recommends that Council authorize the Public Works Director to execute a contract with AECOM in the amount of \$109,065 for professional engineering services for the design of water pump, mechanical, electrical, and instrumentation rehabilitation at the Escondido and Bothin Pump Stations. AECOM submitted a proposal in response to the Request For Proposals (RFP) issued by the City. Three other qualified firms also submitted proposals. All proposals were reviewed and evaluated by City staff and a Water Commissioner. AECOM's proposal was selected based on their technical response to the RFP and their experience in this type of work.

FUNDING

The following summarizes all estimated total project costs:

ESTIMATED TOTAL PROJECT COST

Design (by Contract)	\$109,065
Design Extra Services (by Contract)	\$10,900
Other Design Costs - City staff and Special Supplies/Expenses	\$32,140
Subtotal	\$152,105
Estimated Construction Contract w/Change Order Allowance	\$456,547
Estimated Construction Management/Inspection (by City)	\$44,010
Estimated Other Construction Costs (construction support services, special supplies/expenses)	\$10,500
Subtotal	\$511,057
TOTAL PROJECT COST	\$663,162

There are sufficient funds in the Water Capital Fund to cover these costs.

SUSTAINABILITY IMPACT:

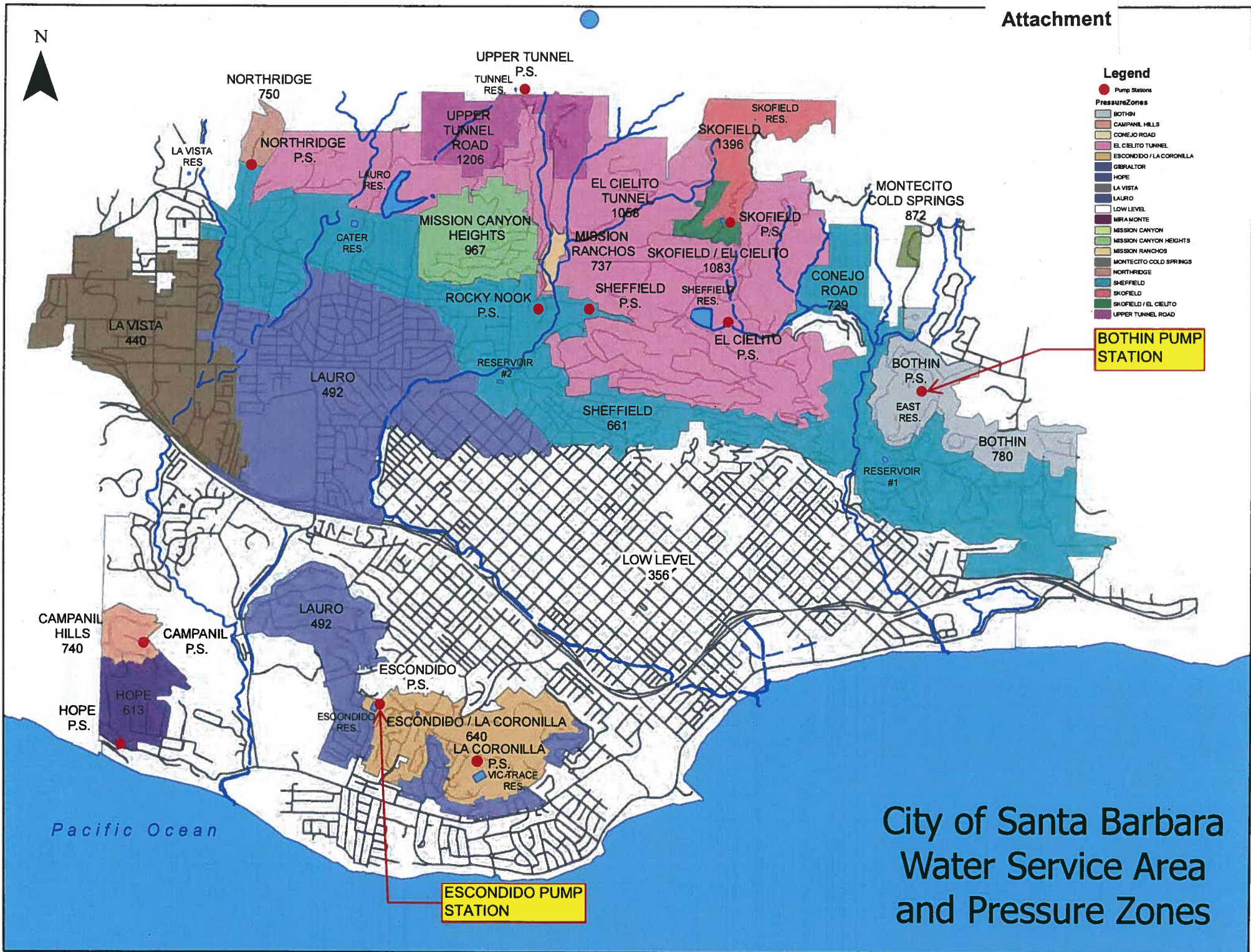
The pump station upgrades will result in increased pump/motor efficiencies that will yield a reduction in energy per volume of water pumped at each of the stations.

ATTACHMENT: City of Santa Barbara Water Service Area and Pressure Zones

PREPARED BY: Joshua N. Haggmark, Principal Civil Engineer/AH/mj

SUBMITTED BY: Christine F. Andersen, Public Works Director

APPROVED BY: City Administrator's Office



City of Santa Barbara
Water Service Area
and Pressure Zones